

## PRODUCT-DETAILS

# CM-MSS.12S

CM-MSS.12S Therm. motor protec. relay 1c/o,  
24VAC/DC



## General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | CM-MSS.12S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Product ID            | 1SVR730700R0100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| EAN                   | 4013614496721                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Catalog Description   | CM-MSS.12S Therm. motor protec. relay 1c/o, 24VAC/DC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Long Description      | <p>The CM-MSS.12S belongs to the CM-MSS thermistor motor protection relay range. It operates with a rated control supply voltage of 24 V AC/DC and has a 1 c/o (SPDT) output with contacts rated at 250 V / 4 A. It features one sensor circuit to monitor PTC temperature sensors and works according to the closed-circuit principle. The relay will be reset automatically after the failure has been removed. A sealable transparent cover for protection against unauthorized changes is available as accessory. The device offers screw connection technology with double-chamber cage connection terminals.</p> |

## Ordering

|                        |               |
|------------------------|---------------|
| EAN                    | 4013614496721 |
| Minimum Order Quantity | 1 piece       |
| Customs Tariff Number  | 85364900      |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 22.5 mm  |
| Product Net Height         | 85.6 mm  |
| Product Net Depth / Length | 103.7 mm |
| Product Net Weight         | 0.113 kg |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 1 piece   |
| Package Level 1 Width          | 97 mm         |
| Package Level 1 Height         | 109 mm        |
| Package Level 1 Depth / Length | 30 mm         |
| Package Level 1 Gross Weight   | 0.137 kg      |
| Package Level 1 EAN            | 4013614496721 |

## Technical

|                                                     |                                                                                                                                                                  |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Function                                            | 1 sensor circuit<br>Auto reset                                                                                                                                   |
| Rated Control Supply Voltage (U <sub>s</sub> )      | 24 V AC/DC                                                                                                                                                       |
| Output                                              | 1 c/o (SPDT) contact                                                                                                                                             |
| Terminal Type                                       | Screw Terminals                                                                                                                                                  |
| Rated Operational Current AC-12 (I <sub>e</sub> )   | (230 V) 4 A                                                                                                                                                      |
| Rated Operational Current AC-15 (I <sub>e</sub> )   | (230 V) 3 A                                                                                                                                                      |
| Rated Operational Current DC-12 (I <sub>e</sub> )   | (24 V) 4 A                                                                                                                                                       |
| Rated Operational Current DC-13 (I <sub>e</sub> )   | (24 V) 2 A                                                                                                                                                       |
| Minimum Switching Capacity                          | 24 V<br>10 mA                                                                                                                                                    |
| Rated Insulation Voltage (U <sub>i</sub> )          | Measuring Circuit / Output Circuit 300 V<br>Output Circuit 1 / Output Circuit 2 300 V<br>Supply Circuit / Output Circuit 300 V                                   |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ) | Output Circuit 1 / Output Circuit 2 4 kV<br>Output Circuit 4 kV                                                                                                  |
| Degree of Protection                                | Housing IP50<br>Terminals IP20                                                                                                                                   |
| Overvoltage Category                                | III                                                                                                                                                              |
| Pollution Degree                                    | 3                                                                                                                                                                |
| Short-Circuit Protective Devices                    | Output Circuit NC - F Type Fuses 6 A<br>Output Circuit NO - F Type Fuses 10 A                                                                                    |
| Electrical Durability                               | AC-12 100000 cycle                                                                                                                                               |
| Mechanical Durability                               | 30000000 cycle                                                                                                                                                   |
| Connecting Capacity                                 | Flexible 1x 0.5 ... 2.5 mm <sup>2</sup><br>Flexible 2x 0.5 ... 1.5 mm <sup>2</sup><br>Rigid 1x 0.5 ... 4 mm <sup>2</sup><br>Rigid 2x 0.5 ... 2.5 mm <sup>2</sup> |
| Tightening Torque                                   | 0.6 ... 0.8 N·m                                                                                                                                                  |
| Wire Stripping Length                               | 8 mm                                                                                                                                                             |
| Mounting Position                                   | Any                                                                                                                                                              |
| Mounting on DIN Rail                                | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715                                                   |
| Standards                                           | CAN/CSA C22.2 No.14<br>EN 50581<br>IEC/EN 60947-5-1<br>IEC/EN 60947-8<br>UL 508                                                                                  |

## Environmental

|                         |                                                    |
|-------------------------|----------------------------------------------------|
| Ambient Air Temperature | Operation -25 ... +60 °C<br>Storage -40 ... +85 °C |
| RoHS Status             | Following EU Directive 2011/65/EU                  |

## Technical UL/CSA

|                                  |                                                                                            |
|----------------------------------|--------------------------------------------------------------------------------------------|
| Maximum Operating Voltage UL/CSA | Output Circuit 300 V AC                                                                    |
| Contact Rating UL/CSA            | B300                                                                                       |
| Connecting Capacity UL/CSA       | Flexible 1x 18-14 AWG<br>Flexible 2x 18-16 AWG<br>Rigid 1x 20-12 AWG<br>Rigid 2x 20-14 AWG |
| Tightening Torque UL/CSA         | 7.08 in-lb                                                                                 |

## Certificates and Declarations (Document Number)

|                                   |                           |
|-----------------------------------|---------------------------|
| CB Certificate                    | CB_DK-40837-UL            |
| CCC Certificate                   | CCC_2005010303165479      |
| CQC Certificate                   | CQC2005010303165479       |
| cULus Certificate                 | cULus508_20140912-E140448 |
| Data Sheet, Technical Information | 2CDC112219D0201           |
| Declaration of Conformity - CCC   | 2020980303000194          |
| Declaration of Conformity - CE    | 1SVD981006                |
| DNV GL Certificate                | DNVGL_TAE00003W4          |
| EAC Certificate                   | EAC_RU_C-DE.ME77.B.01825  |
| Environmental Information         | 1SAA981024-2401           |
| GL Certificate                    | GL_13759-14HH             |
| Instructions and Manuals          | 1SVC730630M0000           |
| RMRS Certificate                  | RMRS_1740020250           |
| RoHS Information                  | 1SVD981006                |

## Classifications

|                            |                                                   |
|----------------------------|---------------------------------------------------|
| Object Classification Code | B                                                 |
| ETIM 5                     | EC002568 - Temperature monitor (motor protection) |
| ETIM 6                     | EC002568 - Relay for thermistor protection (PTC)  |
| ETIM 7                     | EC002568 - Relay for thermistor protection (PTC)  |
| eClass                     | V11.0 : 27371503                                  |
| E-Number (Finland)         | 2712395                                           |
| E-Number (Sweden)          | 3860714                                           |

## Categories

Low Voltage Products and Systems → Control Products → Electronic Relays and Controls → Thermistor Motor Protection Relays

